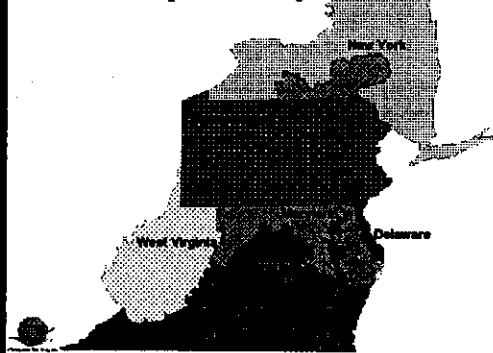


The Chesapeake Bay Program: A Watershed Partnership

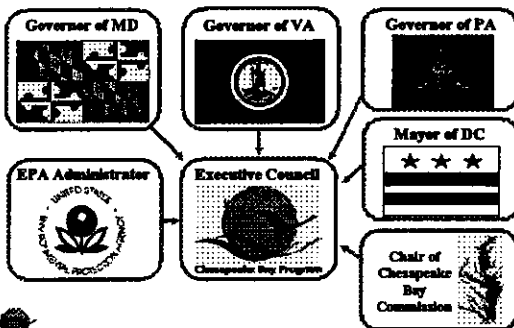


Chesapeake Bay Program

Chesapeake Bay Watershed



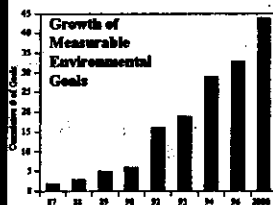
The Chesapeake Bay Program Partnership



Winning Public Endorsement for Goals

- A single LANDMARK goal in 1987 served as a catalyst for subsequent goals:
40% NUTRIENT REDUCTION BY THE YEAR 2000
- Investments in data gathering and models paid off in winning public endorsement:
Where you don't have good data you don't have good goals.

Winning Public Endorsement for Goals



- The landmark 40% nutrient reduction goal contained in the 1987 Agreement was a highly successful prototype for many subsequent goals.
- It was the origin for an outcome-based management ethic which has grown stronger over the years.

Upstream Local Benefits of Nutrient Reduction for the Chesapeake

- Water quality improvements
- Fish passage and recreational fishing
- Habitat restoration
- Water trails

Chesapeake 2000 Goals: Living Resources and Vital Habitat

- By 2010, a tenfold increase in native oysters.
- By 2010, locally supported watershed management plans in 66% of the Bay watershed.
- Achieve a no-net loss of existing wetlands.
- Restore 25,000 acres of tidal and non-tidal wetlands by 2010.
- Implement wetlands preservation plans in 25% of the watershed by 2010.



Chesapeake 2000 Goals: Water Quality Restoration and Protection

- By 2010, correct all nutrient and sediment-related problems in the Chesapeake Bay and its tidal tributaries.
- Through voluntary means, strive for zero release of chemical contaminants from point sources (including air sources).
- By 2003, establish appropriate areas within the Chesapeake Bay and its tributaries as "no discharge zones" for human waste from boats.



Chesapeake 2000 Goals: Sound Land Use

- Permanently preserve from development 20 percent of the land area in the watershed by 2010.
- By 2012, reduce the rate of harmful sprawl development of forest and agricultural land in the watershed by 30 percent.
- By 2010, rehabilitate and restore 1,050 brownfields sites to productive use.
- By 2010, expand by 30 percent the system of public access points to the Bay.
- By 2005, increase the number of designated water trails in the Chesapeake Bay region by 500 miles.



Chesapeake 2000 Goals: Stewardship and Community Engagement

- Beginning with the class of 2005, provide a meaningful Bay or stream outdoor experience for every school student in the watershed before graduation from high school.



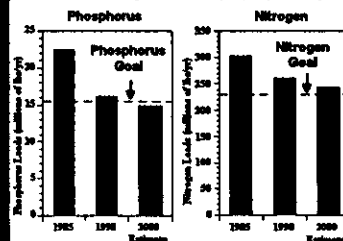
Value of Goal-Setting, Partnerships and Voluntary, Consensus-Based Efforts

- Goals adopted through voluntary agreements made by the chief executives of the Program have succeeded in leveraging several hundreds of million dollars in programs and private initiatives from partners and stakeholders.
- The annual investment is estimated be over \$16 million from other federal agency partners and over \$100 million from state agency partners, in addition to the \$20 million base EPA budget.



Nutrient Pollution Declining, but We Still Need to Do More

Total Nutrient Loads Delivered to the Bay
from All Bay Tributaries (MD, PA, VA, DC).



Maintaining reduced nutrient loads after 2000 will be a challenge due to expected population growth in the region.

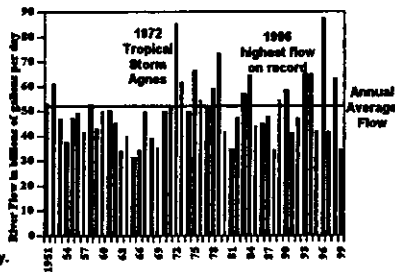
Source: Chesapeake Bay Program Phase IV Watershed Model.
Data include total nutrient loads delivered to the Bay, from point and nonpoint sources, from Chesapeake Bay Agreement jurisdictions: MD, PA, VA, and DC.



River Flow into Chesapeake Bay

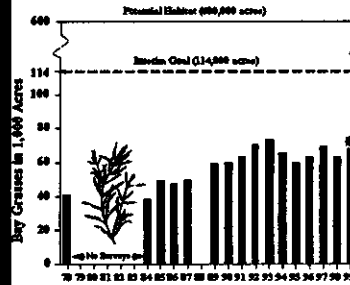
Since 1972, there have been many years with higher than average freshwater flow to the Bay.

Higher flows, depending on the time of year that they occur, can deliver increased amounts of sediment and nutrients to the Bay.



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Bay Grasses Have Increased Since 1984



Bay grass beds are vital habitat for fish and crabs.

Improved water quality will promote Bay grass growth.

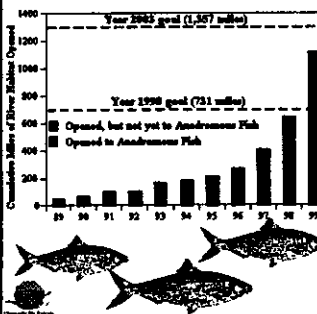


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* Note - The highest year of the bar includes estimated additional acreage.



Progress Made Getting Migratory Fish Past Dams and Other Blockages



Fish, like shad, that live in the Bay and ocean as adults and migrate to spawn in freshwater are called anadromous fish.

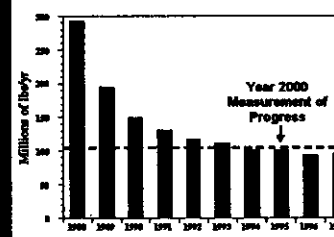
Fish passages help anadromous fish swim upstream, past dams and other blockages, to reach freshwater spawning habitat.

The removal of stream blockages and construction of fish passages, between 1988 and 1999, reopened 1,032 miles of historic spawning habitat to migratory fish and an additional 81 miles to resident fish. A total of 1,113 miles have been reopened.



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Industry Reduces Chemical Releases



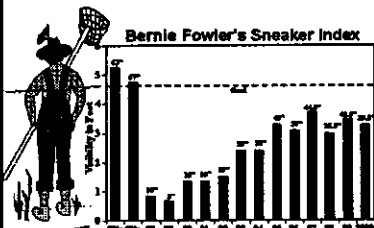
Bay basin industries have achieved their voluntary goal of reducing chemical releases and transfers of chemical contaminants 65% between 1988 and 2000.

Since the year 2000 goal has been achieved, the Chesapeake Bay Program will consult with industry to set new targets.



10/1/00

Citizens Are Interested in Tracking Progress in Bay Clean-up



Wading into the Patuxent River at Broome's Island, MD, Bernie Fowler has seen improvements in water clarity since 1986. He says, "although this is not a scientific measure, it puts restoring the river on a human scale."



10/1/00

Groundrules for Consensus-Building

- Seek simple measurable goals – how much, by when, based on what baseline?
- Regulation is only one tool among many – focus on results, not control.
- Don't argue over whether current conditions are good enough – let one person's "restoration" be another person's "preservation".
- Focus on what you can contribute to solutions, not on what you think others did to cause the problem.
- Don't worry about someone else's relative power; focus on your combined power.
- Give the Partnership process a chance to work – avoid statements critical of others.



10/1/00

Getting Around the "Roadblocks"

- Fear of not attaining goals: any progress is good, and most likely will not occur unless you set challenging goals – if you "come up short", celebrate the progress and admit that more work needs to be done.
- The "science isn't there yet": the "science" will never be "there". Voluntary agreements don't need to be based on perfect science, just an honest interpretation of the best science available at the time.
- Inequity: decide on what your share of the solution will be, not on what you think others' shares should be.
- Won't be able to reach consensus with so many "players": initially focus on the "players" with the greatest impact.



Additional "Lessons Learned"

- Agree on a baseline before the goal is adopted.
- Involve state legislatures in the partnership (Chesapeake Bay Commission)
- Involve many federal agencies in the partnership, but keep the "balance of power" with the states.
- Keep the public engaged – inform and involve citizens in setting and achieving the goals.

